MAPPS AND DATA ANALYSIS

OVERVIEW

The Mapping and Analysis Pre-Exam Planning Software (MAPPS) is an interactive, automated tool used by DCA's examiners during Pre-Examination Planning (PEP). MAPPS integrates cartographic and loan data to assist in the analysis of a financial institution's compliance with fair lending, CRA and other consumer protection laws. There are three interlocked components of MAPPS:

- The CRA Analyzer, which is the user interface
- Tactician mapping software
- HMDA, cartographic, census, and flood data

IN THIS APPENDIX

IN THIS APPENDIX (cont'd)

TACTICIAN SOFTWARE

Tactician is an interactive mapping and analysis tool that lets you put data, whether they are customers, bank locations, demographics, loans, sales data, territories, or assessment areas, on the map.

CRA ANALYZER

The CRA Analyzer is an interface written specifically for the FDIC that allows examiners to see and use portions of the Tactician software that are most commonly used in the examination process. This interface simplifies Tactician functions so that a new user working with the CRA Analyzer for only a short time can comprehend and efficiently use the product.

The CRA Analyzer incorporates:

- Importing HMDA data into an analysis
- Importing CRA data into an analysis
- Importing and mapping loan portfolio data to address level
- Drawing radial and polygon shaped assessment areas
- Building assessment areas based on existing geography

The CRA Analyzer focuses all of the functionality of Tactician for analysis needs and will assist in performing the examination process accurately and efficiently.

Accessing the CRA Analyzer

Depending upon the computer used, the CRA Analyzer is accessed in one of two ways:

- Click on DCA mapping (on a Gateway system)
- Double-click the CRA Analyzer icon (in the Tactician program group)

The Tactician Program group has two icons. The CRA Analyzer icon will launch the CRA Analyzer interface and run Tactician in the background. The Tactician standard icon will start the Tactician software.

THE TOOLBAR AND HOW IT FUNCTIONS

When the CRA Analyzer is launched, the CRA Analyzer Toolbar will appear. Nearly every feature of the CRA Analyzer can be performed from this Toolbar. Across the top of the window are pull-down menus from which functions can be performed.

Overview

The default location of the Toolbar is the upper left-hand corner of the window. The Toolbar may be moved at any time, regardless of whether there is a map in the window. To turn the Toolbar off, click on the upper lefthand button. To turn the

Toolbar on, select option/view Toolbar from the drop down menu.

The CRA Analyzer Toolbar has four sections:

- Navigation
- Delineation
- Flash Reports
- Buttons

Navigation

Navigation Buttons on the Toolbar

Use the Navigation section of the Toolbar to navigate around a map or adjust the rectangular area displayed as a map. The user can adjust the displayed area by changing the point on which it is centered or by changing the amount of area shown (scale).

There are four buttons that provide shortcuts to making these adjustments. They are on the Toolbar in the top area labeled "NAVIGATION." The four tools work in different ways, thus offering the option to use a preferred method. The four tools are:

- Zoom Tool
- Hand Tool
- Jump Tool
- Set Height Tool

Using the Navigation tools, you can:

- Zoom in on a specific part of the map
- Adjust the center of the map image
- Center the map on a specific location, e.g., a city
- Set the amount of geography displayed on the map

THE TOOLBAR AND HOW IT FUNCTIONS (cont'd)

Navigation (cont'd)

Zoom Tool
This allows the user to "zoom-in" on an area of the current screen. Unlike zoom features in some software, this zoom tool does not "zoom-out" again. The zoom tool, and a mouse, may be used to define a smaller rectangle on the screen that will become the new map area. To zoom-in on a map, follow the steps below.
1. Click on the Zoom Tool button.
2. Position mouse at the upper left corner of the portion of the screen that will become the new map area.
3. Click and hold the mouse button while moving the mouse diagonally to the lower right corner of the rectangle (mapped area) to be enlarged.
4. Release the mouse button. The display area will change to show a blown-up image of the rectangle just defined.
Hand Tool
This tool is used to adjust the center of the map image. It can be used to grab the new center wanted on the screen and drag it to the center of the screen image. Think of the map image as the surface of the globe, then use this tool as if you are reaching out a finger, touching the globe, and pulling it into a new position to re-center the view.
The tool works best while displaying cross-hairs in the center of the map. The cross-hairs feature may be toggled on and off by pressing the "X" key on the keyboard. To use the Hand Tool, follow the steps below.
1. Make certain that the cross-hairs feature is turned on (if not, toggle it on by pressing the "X" key).
2. Click on the Hand Tool button.
3. Using the mouse, place the cursor on the area of the screen which you have designated to be the center of the revised picture.
4. Hold down the left mouse button, while moving the cursor to the center of the screen (Drag and Drop).
5. Release the mouse button and the map image will be redrawn. The point designated in step 3 will be the new center of the screen.
Jump Tool
The Jump Tool is used to center the map on a specific location, e.g., a city. To use the Jump Tool, follow the steps below.
1. Click on the Jump Tool button to bring up the Set Location dialog box. The Set Location dialog box is used to enter a specific location, which will then display as the center of the revised map.
2. The most common method to use for setting location is Place Name. Click on "Place Name" in the Location method input area.
3. To select a State, click on the down arrow by the state field and click on the desired State.

THE TOOLBAR AND HOW IT FUNCTIONS (cont'd)

Navigation (cont'd)

4. Enter the name of the city. Click once in the name field and type the name of the city to be displayed. If more than one city is displayed, click on the correct city to select it. Click on the Set button.

5. The screen will display a message requiring the user to set the height of the map. This is the distance, in miles, from the top of the map screen to the bottom. Accept 50 or change, then click on OK.

Set Height Tool

The Set Height tool is used to adjust scale. The height number listed on the tool is the distance from the top of the map screen to the bottom of the map screen, expressed in miles.

This tool does not change the center point of the map display, but it can be used to get a closer view (zoom-out) of the area displayed.

1. Use the Set Height tool to adjust the number of square miles shown by the map.

   - Double the height of the map display

     Click on the small button which has a triangle pointed up to increase the number of square miles shown by the map (zoom-out).

   - Cut the height of the map display by half

     Click on the small button which has a triangle pointed down to decrease the number of square miles shown by the map (zoom-in).

   - Change to a specific height in miles

     Left click on the area where the current height number is displayed to bring up the Set Height dialog box. Type the desired map height in miles and press <Enter>.

Delineation, Flash Reports, and Buttons

Three other sections of the Toolbar are used for the following purposes:

- Delineation – use this section of the Toolbar when creating or building assessment areas
- Flash Reports – use this section of the Toolbar to create demographic reports, market share reports, and variable reports for a specific geographic area such as Census Tract, Block Numbering Areas, (BNAs) or Block Groups
- Buttons – use this section of the Toolbar to add HMDA or demographic variables to an analysis, perform calculations using existing variables, or change the colors, symbols, or data classifications of a map

BLOCK GROUP ANALYSIS

Although an analysis at the block group level is available using the Mapping Software, examiners should realize that the current CRA Regulations specifically state census tracts and block numbering areas (as opposed to block groups) as the geographic divisions upon which the CRA performance will be evaluated.

However, using block group analysis may be helpful in certain instances, such as for consumer complaints, investigations or examinations of rural financial institutions where BNAs cover large geographic areas. Keep in mind that block groups may be helpful when mapping, but an examiner should not criticize banks for not lending in specific block groups.

TYPES OF DATA ANALYSIS

Based on HMDA Data - Data from HMDA CDs

Use this option to create a map displaying data for a specific reporter from the HMDA CDs. You must have the HMDA CDs for the year and region of the country in which the reporter has loans.

Based on HMDA or CRA Data - File from Reporter

Use this option when you have a reporter's HMDA or CRA file for a given year. The file can be in Lotus, MS-Excel, dBase, tab-delimited or comma-delimited text format. It is also possible to download a HMDA or CRA file from the Federal Financial Institutions Examination Council (FFIEC) HMDA or CRA reporter software.

Based on a Loan Portfolio

Use this option when you have a file containing a reporter's loan portfolio and want to plot loans by address or according to the Census Tract from which the loan came. The reporter's loan portfolio file must be in Lotus, MS-Excel, dBase, tab-delimited or comma-delimited format. (If you have installed the Block Group supplemental data and cartography, you can choose Block Group analysis instead of Census Tract.)

Based on a User Defined Map

Use this option if the reporter is not a HMDA reporter, CRA reporter, or if the reporter has not provided a loan portfolio. While no reporter-specific data is associated with the map, demographic data can be obtained for the reporter's assessment area.

CREATING A NEW ANALYSIS

No matter what type of analysis you choose, you always begin a new analysis the same way.

1. Click the **File New** Button or select **File>New**.

   The *Create New Analysis* dialog box displays.

2. Select **Census Tract** for analysis level (if you have installed the Block Group supplemental data and cartography, you can select Block Group for analysis level). **Tab** to Analysis Name.

3. Type in the analysis name. (Up to 40 characters are allowed, including spaces.) Tab to the description and type an optional description.

4. **Tab** to Reporter ID#. Type the Reporter ID# and select a year from the year drop-down list . Click **OK**. The *Reporter Query* dialog box displays. Click **OK**.

5. The *Import Data* dialog box displays. Select the type of Loan Data, **Tactician CDs** for File Type and click **OK**.

6. Insert the appropriate HMDA LAR CD when prompted and click **OK**.

7. Insert the Core Data and Cartography CD when prompted and click **OK**.

   Once the data is processed, the map of the area displays on the screen.

BUILDING AND CARVING ASSESSMENT AREAS

Assessment areas based on geography can use county, state, ZIP Code, Census Tract, MSA or MDC/CCD (towns/cities) as the basis of the analysis.

NOTE: All analyses include an assessment area named HMDA consisting of all areas where there are loans and/or a reporter has HMDA activity.

Building an Assessment Area Based on Geography

1. Click the **Build Tool** icon. The *Build Assessment Area* dialog box displays. In Data Selection Filters, choose a **Geography**. Click the **MCD/CCD** radio button. Use the States drop-down list to select a state. Use the Counties drop-down list to select a county. The Available List displays all divisions in a county.

2. To select an item from the Available list you can double-click the item or drag and drop the item from the Available list to the Selected list. Select a division. It is also possible to include a different geography type when creating an assessment area. For example, suppose you need to include a Census Tract outside of the MDC/CCD you selected. In Data Selection Filters, click the **Tract** radio button. Use the Counties drop-down list to select a county. In the Available List all Census Tracts in the county display. Select a census tract and click **OK**. The *Edit or Add Assessment area* dialog box displays.

BUILDING AND CARVING ASSESSMENT AREAS (cont'd)

Building an Assessment Area Based on Geography (cont'd)

3. In the Name text box, type a name for the assessment area and click **Done**.

   NOTE: When naming your assessment areas choose something appropriate for display in your reports. When processing is complete, the map redraws with a red boundary surrounding the assessment area.

Carving Assessment Areas

There are two tools available to carve assessment areas: polygon and circle. To change from one tool to another select **Options>Carver** and choose the tool of your choice.

Use the Polygon carver when your assessment area is not radial and does not follow geographic boundaries.

1. Click the **Polygon Tool** icon. When you move the cursor over the map it displays as a pencil.
2. Place the tip of the pencil at the point on the map where the polygon is to begin and **click**. Continue to the first corner of the assessment area and **click** to create a corner. Continue clicking corners of your assessment area. When you want to close the area, **double-click at the beginning point**. To cancel the procedure at any time, press the delete key.

NOTE: You can edit the polygon by dragging and dropping the white handles to new locations. To add a handle to a line, double-click the polygon line. To remove an existing handle, double-click the handle you want to remove.

When your polygon is complete, click **Done**. The *Edit or Add Assessment area* dialog box displays. Type a name for the assessment area and click **done**. When processing is complete, the map is redrawn with a red boundary surrounding the assessment area.

Use the *circle carver* to define an assessment area with an exact radius in *x* number of miles.

1. Click the **Circle** tool icon. The Define Circle dialog box displays. Type the radius in miles and click **OK**, the map redraws. When you move the cursor over the map it displays as a pencil.
2. Place the tip of the pencil to the point on the map where you would like the center of your radius to be and **click**.

   NOTE: You can edit the assessment area by dragging either of the two white handles on the circle.

When your circle is complete, click **Done**. The *Edit or Add Assessment area* dialog box displays. Type a name for the assessment area and click **Done**. When processing is complete, the map is redrawn with a red boundary surrounding the assessment area.

SAVING YOUR

CRA Analyzer automatically saves your analysis as you work. Each time you make a modification, CRA Analyzer saves your work. You can also save your

WORK

analysis periodically while you work or before closing the analysis.

To save your analysis:

1. Select **File>Save**. The analysis name remains the same as the one you originally created.

CRA Analyzer provides you with the option of saving different versions of your analysis. Use the **File>Save As** command to create a duplicate of your analysis with a different name. CRA Analyzer preserves the original analysis.

To save an analysis with a duplicate name:

1. Select **File>Save**.
2. Select **File>Save As**. You are prompted for a new name and description. Keep in mind that this *new* name is now in effect should you do a File>Save operation. Continue working with the new analysis, leaving the original preserved.

EDITING ASSESSMENT AREAS

Once you have built an assessment area, you can go back to the assessment area to

- Edit the area,
- Delete the area,
- View associated data, or
- Map specific areas.

Editing Assessment Areas

1. Select **Map>Edit Assessment Area** to display the *Edit or Add Assessment Area* dialog box.
2. **Double-click** the assessment area to place it in the Name text box. Click the **Edit** button. The *Set Height* box displays. Specify a height large enough to display the entire polygon (100 miles). The handles of the polygon appear on screen. Use the same editing rules described earlier.

   NOTE: The original polygon lines remain on the screen until you click Done.
3. Edit the polygon. Click **Done** when you are finished. The *Edit or Add Assessment* dialog box displays. Click **Done** to reprocess and redraw the map.

When editing a radial assessment area, there are two handles of the circle that display on the screen. The original circle lines remain on the screen until you click **Done**.

When editing a geographic assessment area, select the geography of choice and either add to the selected list or drag the item to the trash can to remove it from the assessment area.

EDITING ASSESSMENT AREAS (cont'd)

Deleting Assessment Areas

1. Select **Map>Edit Assessment Area** to display the *Edit or Add Assessment Area* dialog box.
2. Select the assessment area to be deleted and drag it to trash can.
3. Click OK to delete the assessment area from your analysis.

Viewing Assessment Area Data

There are two view levels for assessment area data.

I. ***Summary level*** - displays data for each assessment area, aggregated from each Census Tract or Block Group within the assessment area.

   1. Select **Map>Edit Assessment Area**.
   2. Click S**ummary**.
   3. Select **Exit** to return to the *Edit or Add Assessment Area* dialog box.

II. ***Detail level*** - displays data for the Census Tract or Block Group of your choice within the assessment area.

   1. Select **Map>Edit Assessment Area**.
   2. Double-click the assessment area of interest to place it in the name text box. Select the assessment area name and click **Detail** to display the data.
   3. Select **Exit** to return to the **Edit or Add Assessment Area** dialog box.

Map Specific Areas

1. Select **Map>Edit Assessment Area**.

   A. Select an assessment area to map by double-clicking the assessment area name and clicking the **Map** button.

   B. To map all assessment areas (including the Tracts/Block Groups in which you have loans) within the analysis, click the **Map all** button.

DESIGNING MAPS

You can control the manner in which data is displayed on the map in a variety of ways using the **Design Map** features of CRA Analyzer. You can modify the colors, the features displayed, and the variables represented.

When you click the **Design Map** tool or select **Map>Design Map**, seven tabs display in the dialog box, each of which controls the way your map looks or the data is displayed.

DESIGNING MAPS (cont'd)

Thematic Tab

The thematic tab controls the colors displayed in the Census Tracts (or Block Groups) and the variable represented. The FDIC default is MSA Income Index (199x) and a user-defined value range with four classes.

Classification Methods

Equal Value Ranges creates equal ranges by dividing the overall range of values by the number of classifications. Each geography variable value is then placed in the appropriate range based on its value.

Equal Class Counts divides the number of variable values by the number of classifications to get an equal number of geographies per class. Ranges are then set according to the highest and lowest variable value for each group of variables.

Means and Standard Deviations determines the standard deviations of the variable chosen. If the number of classes chosen is even, the middle classes fall on either side of the mean. Each successive class away from the mean has a limit that is one standard deviation higher or lower. If the number of classes is odd, the middle class contains the mean. Each successive class away from the mean has a limit of one standard deviation higher or lower, except for the middle class which has limits one-half a standard deviation higher or lower.

User-Defined Value Ranges allows you to set the range of values for each class. You must specify the class limits in ascending order. The upper limit of a class is the same as the lower limit of the following class. The minimum and maximum values of the variable display on the Thematic tab.

User Defined Class Counts per Range allows you to set the number of variable values per class. You must specify the class limits in ascending order. The upper limit of a class is the same as the lower limit of the following class. The minimum and maximum values of the variable display on the Thematic tab.

User Defined Class Percentages allows you to specify the percentage of the total number of Census Tracts (or Block Groups) for each class. The sum of all percentages must not exceed 100. The minimum and maximum values of the variable display on the Thematic tab.

Individual Values can display character as well as numeric data values. The number of classes will be determined from the number of discrete values found in the data, with a maximum of 20 classes.

DESIGNING MAPS (cont'd)

Dot Density Tab

The Dot Density tab controls the display of dots representing variable data. The default display of red dots represents the number of applications in a Census Tract. Use this tab to represent any variable in your data sheet by dots and change the dot color, dot size or the number of items each dot represents.

Labels Tab

The Labels tab allows you to place up to three labels displaying actual data values on the map.

Overlays Tab

The Overlays tab controls the display of specific items on the map such as cities, county boundaries and streets.

Assessment Area Tab

The Assessment Area tab controls the display of labels, boundaries and points on your map representing the assessment areas you defined.

Loans Tab

The Loans tab controls the settings pertaining to shapes representing loan customers. This tab is not available in a HMDA from CD analysis.

ADDING VARIABLES

You can add HMDA and Census demographic variables to an analysis. After you add new variables to your analysis, you can map them, calculate other variables with them, and generate reports containing the variables. For example, you might compare an individual reporter's HMDA activity to the HMDA activity of all the reporters in a Census Tract.

1. Click the **Add Var** tool or select **Data>Add Data**. The Add Variable dialog box displays.
2. Use the Available Tables drop-down list to select the table from which you want to add variables. To select a variable, double-click the variable or select it and click Add. The variable appears in the Selected Variables list.

You can select multiple variables from a single table as well as multiple variables from multiple tables.

ADDING VARIABLES (cont'd)

Choose the (03)Age/Marital Status table and the following variables:

- Pop: Aged 25-44 years
- Pop: Aged 45-64 years
- Pop: Aged 65+ years

3. Click OK to add the variables.

You are prompted as to whether or not you want to modify the map. Select Yes.

Click Select on any Design Map tab and the variables you added appear at the bottom of the list. You can now use these variables in a variety of ways through the Design Map tool.

BUILDING YOUR OWN VARIABLES

CRA Analyzer provides very powerful data manipulation capabilities to create and modify variables. You can build formulas efficiently and avoid typing long formulas. You can save and modify formulas and use them over and over again.

To build a formula and perform a calculation:

1. Click the **Calculate**  tool in the toolbar or select **Data>Calculate**. The *Formula to Evaluate* dialog box appears.
2. Build a formula by typing values, clicking operator buttons, and selecting functions and variables. When you click an operator button or select a function, a variable from your analysis, or a system variable, it appears in the Enter Formula Here text box. Spaces in formulas do not affect calculations. CRA Analyzer puts spaces after variables, functions, and operators to enhance readability.

IMPORTING HMDA DATA FROM A REPORTER FILE

Use this method to create an analysis when you have a file of HMDA data not on CD.

1. Click the **New**  tool or select **File>New**. The *Create New Analysis* dialog box displays. Fill in the Name, the Description, the Reporter ID (leave blank) and the year and click **OK**. A dialog box displays reminding you that you have not selected a reporter. Click **No** for this analysis.

IMPORTING HMDA DATA FROM A REPORTER FILE (cont'd)

2. The Import Data dialog box displays. Select **HMDA** for Type of Loan Data and **User defined** for File Type and click **OK**. The **Enter Source Data file** *Name* dialog box displays. Fill in the file name and click **OK**.
3. The *Import HMDA Data from Foreign File* dialog box displays. Select the appropriate file type for your data file and the method by which you want to map loans. Select **Has column header**.
4. Drag and drop the available columns into the appropriate target columns and click **OK**.
5. When processing is complete and the map is drawn you can save the analysis prior to making any modifications.

IMPORTING CRA AND HMDA LOAN DATA FROM FFIEC FORMAT FILES

If your analysis is at the Census Tract level, you can import CRA and HMDA loan data from files in FFIEC (submission) format. CRA Analyzer imports any files you created for submission directly; you do not need to convert the files.

Before you can import loan data, you must have an analysis open or be in the process of creating a new analysis.

1. If you are creating a new analysis, CRA Analyzer takes you to the *Import Data* dialog box automatically. If you already have a map in your analysis and you want to import CRA or HMDA loan data from an FFIEC file, select **Loans>Import**.

   Create a new analysis called **FFIEC Import** and fill in the Description. Leave the Reporter ID# blank and click **OK**. A dialog box displays reminding you that you have not selected a reporter. Click **No** for this analysis.
2. The Import Data dialog box displays. For Type of Loan Data select **HMDA for HMDA loan data** and **FFIEC Format** for file type and click OK.
3. The **Enter Source Data File Name** dialog box appears. Select a file with a .DAT file name extension and click **OK**. Because we did not enter a Reporter ID# a dialog box displays.

   Click **OK**. CRA Analyzer imports all CRA and HMDA loan records in the file, places the loan data on the map, and displays the map.

EXPORTING CRA AND HMDA LOAN DATA AS AN FFIEC FORMAT FILE

If you have CRA or HMDA loan data, you can export this loan data from CRA Analyzer into an FFIEC format file. You can then import the file directly into the Federal Reserve data entry software for subsequent submission to your regulator.

1. Open an analysis.
2. Select **Loans>Export**. Select **HMDA - FFIEC** to export HMDA loan data. The *Enter Target Data File Name* dialog box appears.
3. Select a drive and destination path. **Type** a file name with a .DAT file name extension.
4. Click **OK**. CRA Analyzer processes your loan data and exports it as an FFIEC format file to the location you specified. CRA Analyzer displays a message suggesting you review your export file.
5. Click **OK** after you read the message.

LOAN PORTFOLIO ANALYSIS

This analysis uses a file that contains loan portfolio information including a geographic identifier for each loan such as the Census Tract or address information. Using a file with a geographic identifier allows geocoding of the file. Geocoding is the process by which each loan application is assigned a geographic location on the map. There are four different file types that can be geocoded.

Address - a file that contains address, city, state and ZIP Code information for each loan application.

Partial Code - a file that contains the Census Tract information in more than one field. For example, it might have the state code, the county code, and the Census Tract code in separate fields.

Full Code - a file that contains the Census Tract code all in one field.

Lat/Long - a file that contains latitude (Y) and longitude (X) information for each loan application.

A file from the reporter can be in comma-delimited, tab-delimited, Lotus, dBase, or Excel format.

1. Click the **New**  tool or select **File>New**. The *Create New Analysis* dialog box displays. Fill in the Name, the Description, the Reporter ID (leave blank) and the year and click **OK**. A dialog box displays reminding you that you have not selected a reporter. Click **No** for this analysis.
2. The *Import Data* dialog box displays. Select **Loan portfolio** for the type of loan data and **User defined** for file type and click **OK**. The *Enter Source Data file name* dialog box displays. Select the file name and click **OK**.

LOAN PORTFOLIO ANALYSIS (cont'd)

3. The *Import Loan Portfolio Data from Foreign File* dialog box displays. Select how to map the loans. Select the file type and enable the **Has column header** checkbox.
4. Drag and drop the fields from the available columns into the target columns and click **OK**.
5. You are prompted for the **GDT Matchmaker** CD that corresponds with the information in your data file. Insert the appropriate CD and click **OK**.
6. You are prompted for the **Core Data and Cartography** CD. Insert it in the drive and click **OK**.
7. The data is processed and the map displays with pink diamonds representing the loans. You can save the current analysis prior to making any modifications.

ADDING DATA TO AN EXISTING ANALYSIS

1. Launch CRA Analyzer and **open the existing analysis**.
2. With the map displayed, select **Loans>Import**. The *Import Data* dialog box displays.
3. Select **Loan portfolio** for type of loan data and **User defined** for file type and click **OK**.
4. In the *Enter Source Data* file name select the file to add. Click **OK**.
5. In the *Import Loan Portfolio data from foreign file* dialog box choose the file type and your choices for the map loans as.
6. Drag and drop the X and Y fields and click **OK**.

After processing the map is redrawn with the additional data.

CREATING A USER DEFINED ANALYSIS

Use this option if the reporter is not a HMDA reporter, and if they have not provided a loan portfolio. While no reporter specific data will be associated with the map, demographic data can be obtained for the reporter's assessment area.

1. Click the **File New**  tool or select **File>New**. The *Create New Analysis* dialog box displays.
3. Select **Census Tract** for analysis level (if you have installed the Block Group supplemental data and cartography, you can select Block Group for analysis level).

CREATING A USER DEFINED ANALYSIS (cont'd)

3. Type in the analysis name. Up to 40 characters are allowed, including spaces. Tab to the description and type an optional description.
4. Leave the Reporter ID# blank and use the Year drop-down list to select a year. Click **OK**. A message displays advising you that you did not select a financial institution for the analysis and asking whether you want to select one. Click **No**.
5. The *Import Data* dialog box displays. Select **Do not import any data** for type of Loan Data and click **OK**.
6. The *Set Location* dialog box displays so you can center your map. CRA Analyzer provides several methods to position your map.

MAPPING WITH SYMBOLS (Using Overlays)

CRA Analyzer uses overlays to display specific items on a map. For example, one overlay displays state boundaries, another overlay displays city names, etc. Not only can you control which overlays are visible and how they display you can also create your own overlays to display specific items such as your branch locations.

CRA Analyzer includes the following additional mapping features:

- Mapping the locations of main offices and branches of financial institutions for each regulatory agency
- Mapping different types of loans by different symbols
- Mapping your branches

Mapping Branches

1. With the current analysis open click the **Design Map** tool. 
2. Click the **Overlays** tab and scroll towards the bottom of the list.
3. Select the branches you want to display and click **OK**. The points draw on the map and the legend updates.

Mapping Different Types of Loans

1. With your loan portfolio analysis open, click the **Design Map** tool or select **Map>Design Map**.
2. Click the **Loans** tab. Click **Loan Portfolio** and then click **Properties**.
3. Select the method of shapes to appear on the map. Choose the variable and the symbol sequence. Modify the shape height and/or colors if you choose and click **OK**. Click **OK** to exit the design map.

   NOTE: Suggested uses are fixed shapes - one for each loan; graduated shapes - good for loan amount; symbol sequence - good for type of loan.

OPENING AN EXISTING ANALYSIS

1. Click the **Open** tool or select **File>Open**. The *Analysis Maintenance* dialog box displays.
2. Select the analysis of choice and click **Open**. The *Analysis Information* dialog box displays. Click **OK** to open your analysis.

ANALYSIS MAINTENANCE

From within CRA Analyzer you will occasionally want to delete old analyses and change analysis names or descriptions. Use the export and import features to backup and add analyses that were exported for archiving or transferred from another computer.

To perform analysis maintenance, close any analysis that might be open.

1. Select **Options>Admin** to display the *Analysis Maintenance* dialog box.
   a. To *open an analysis*, select a name and click **Open**.
   b. To *delete an analysis*, select the name(s) and click **Delete**.
   c. To *export an analysis*, select the name(s) and click **Export**. The *Select target folder* dialog box displays. Select the drive and directory in which you want to store the analysis and click OK. The analysis is stored in four directories: cartog, dbf, docfiles and scripts.
   d. To *import an analysis*, click **Import**. Position the directory to scripts to display the filename. Select the file and click **OK**. The *Import Analysis File(s)* dialog box displays. Select the analysis and click **OK**. The *Analysis Maintenance* dialog box displays with the imported analysis in the list.
2. Click **Done** to exit Analysis Maintenance.
3 Keep analysis open.

PRINTING MAPS

You can print your CRA Analyzer maps and all of the legends that accompany each map.

1. Select **File>Print Map**. The *Print Map* dialog box appears.
2. You can type a title in the Map Title text box or you can keep the default map title, which is the name of the analysis and the name of the institution (if you specify a reporter ID when you create the analysis).
3. You can type a subtitle in the Map Subtitle text box or you can use the default map subtitle, which is the description of the analysis.

   NOTE: CRA Analyzer normally prints maps in landscape orientation. You can click Print Setup to change printer settings. Options vary according to your printer and network. Click OK to return to the Print Map dialog box.
4. Click **OK**. CRA Analyzer prints the map as you specified.

EXITING CRA

To avoid losing your data and damaging the software, it is important to exit CRA Analyzer properly.

Select **File>Exit**. You are prompted to save your changes or to cancel. Selecting cancel will leave CRA Analyzer active with the current analysis on the screen.

OR

From Windows 95, click the close button (X) on the program's toolbar.

From Windows 3.1, click the close button (-) in the left upper corner of the program's window.

You WILL NOT be prompted to save your analysis.

DO NOT close the Tactician application before CRA Analyzer. Exiting CRA Analyzer properly automatically closes Tactician.

HELP FILE

CRA Analyzer's online help system has many features to help you find information quickly and navigate among the Help Topics.

Using Online Help in CRA Analyzer

To get to Online Help while in CRA Analyzer, simply press the **F1** key on your keyboard, or go to the menu bar at the top of the CRA Analyzer window and choose **Help**.

Searching for Help Topics

- Help has a contents screen, which is similar to a Table of Contents in a book. To reach the contents screen when you are in an analysis, select Help>Contents from the menu bar.
- Help has keywords for searching, similar to Index entries in a book. To search by keywords when you are in an analysis, select Help>Search for Help On and then type in the keyword or words.
- When you are in Help, click the contents button at any time to get to the Contents screen.

CUE CARDS

Cue Cards allow you to choose a topic and follow step-by-step instructions on completing the desired task.

OTHER HELP TIPS

- Resize the Help window so you can see your analysis, by moving your cursor over the border of the window until you see a double-pointed arrow. Then use the arrow to move the window border in and out and up and down until the window is the size you want. Use the scroll bar on the right side to scroll up and down.
- Move the Help window by clicking the title bar at the top of the window and dragging the window.
- Click text with a solid underline to go to the topic the text describes. The text and underlining are usually green, but the color may differ if you are using system colors in Help.
- Click text with a dotted underline to see a definition of the underlined word pop up on top of the Help topic. Click again to dismiss the definition. The dotted underlining and text are usually green, but the color may differ if you are using system colors in Help.
- Click the >> and << buttons to follow a browse sequence forward (and back) through all of the Help topics.
- Click the Back button to move to the last topic viewed.
- Click the Print button, or select File>Print Topic, to print the current topic.
- Select Edit>Copy to copy a topic to the clipboard.
- Select Edit>Annotate to type a note that becomes part of Help. A paper clip icon appears in Help to mark the annotation. Anyone using your Help system can click the paper clip to read the annotation.
- Select Bookmark>Define to mark your place in Help. Once you define a bookmark, you can return to that place by selecting Bookmark and selecting the name of the bookmark from the drop-down list.
- Select Options>Keep Help on Top to display Help on top of your analysis. You can follow the steps in a Help procedure while you perform the task in CRA Analyzer.
- Select>Options Display History Window to see a list of all the topics you visited.
- Select>Options Font and select Small, Normal and Large to change the size of the text in Help.
- Select>Options Use System Colors to use colors from your computer system in Help.

VERSION 4.0 FEATURES

Incorporate CRA Aggregate Data (Market Data) in Data Sets and in Reporting Capabilities

- Distribution of Loans Across Assessment Area by Income Level of Census Tract
- Loan Information by Income of Applicant as a Percentage of Median Family Income
- Loan Mix of Reportable Loans In and Out of Assessment Area
- Variables for Mapping
- Cross Tabs

Analyze Data for Puerto Rico

- Ability to Analyze HMDA and CRA Data for Puerto Rico
- Demographic Data for Puerto Rico
- Ability to Geocode Loan Portfolio Data for Puerto Rico

Select "Similarly Situated Bank Reports" Reporting Capabilities

Two new "Similarly Situated Bank Reports" have been created.

- Small Business Loans Report: selections are originations, purchases and both.
- Small Farm Loans Report: selections are originations, purchases and both.

Import Affiliate Data

The ability to import an affiliate loan data file is available for CRA Loans.

Import Small Business/Farm Revenue

The field for Business/Farm Gross Annual Revenue is treated as a code.

Access HUD Income Figures

Used in the calculations of the Distribution of Loans Across Assessment Area by Income Level of Borrower Worksheet.

FFIEC Header Record

To be accurately imported, all FFIEC format files must have a header record, which determines the year of the file.

The FFIEC submission format defaults to the year 1998 if there is no header record.

VERSION 4.0 FEATURES (cont'd)

Analyze 1995 HMDA Activity for any Reporter	Analyze HMDA activity for any Reporter with 1995 HMDA data on Tactician CDs. 1994 and 1993 HMDA lending information is also available on Tactician CDs.
Import FFIEC Format Files	Import files that you export from Federal Reserve data entry software. CRA Analyzer imports FFIEC format files directly; you don't need to define fields. (See Importing CRA and HMDA Data from an FFIEC Format File.)
Import CRA, HMDA, and Loan Portfolio Data	Import data from your spreadsheet or database files. CRA Analyzer imports several standard data formats.
Import CRA, HMDA, and Loan Portfolio Files	Import files without defining field names each time. CRA Analyzer retains the fields you define the first time so that you don't have to spend time defining fields each time you import.
Map, Analyze, and Report on CRA Data for Consumer, Small Business, and Farm Loans	See how your CRA lending activity looks on the map.
Generate CRA Worksheets for your CRA Analysis	Generate your Assessment Area, Economic Profile, Lending Profile, Distribution, and Penetration worksheets right from CRA Analyzer. (See Generating Worksheets.)
Export your HMDA and CRA Loan Data from CRA Analyzer in an FFIEC Format File	You can import this file directly into the Federal Reserve data entry software for subsequent submission to your regulator. (See Exporting CRA and HMDA Loan Data.)

VERSION 4.0 FEATURES (cont'd)	
Generate Loan Detail Reports on your Loan Portfolio, CRA, and HMDA Loans	View FEMA analysis reports and more. (See Generating Loan Detail Reports.)
Map the Locations of Main Offices and Branches of Financial Institutions for Each Regulatory Agency	See how your location relates to other offices. (See Specifying How Overlays Display on Your Map in standard Help and Displaying Main Offices and Branches of Financial Institutions on Your Map in the Cue Cards.)
Zip Fallback	Use a proprietary ZIP Fallback method to improve address matching results, especially in rural areas.
Generate Standard Reports that List Dollar Lending Amounts	See the total dollars lent by a single reporter, and by all reporters, in a specific assessment area. (See Generating Standard Reports.)
Customize the Font, Style, Size, and Color of the Label Text on your Maps	Customize your maps to display your data effectively and attractively.
Bank Information Flash Reports	Generate Bank Information flash reports that provide information on the bank closest to any point you click on the map. You don't need reporter ID numbers to get information about banks in a specific area; just click a point on your map. Information for these reports comes from the FDIC Structure Database.

VERSION 4.0 FEATURES (cont'd)

Map Different Types of Loans with Different Symbols and Colors

For example, if you map loans by purpose, you could map home purchase loans with blue dots and home improvement loans with yellow dots. You can choose from several different symbol sequences to map your loans and make the loan data easy to read and interpret on the map.

Map Loans with Graduated Shapes

Display loans with greater variable values with larger shapes than loans with smaller variable values. For example, you could map loan balances with graduated triangles; loans with higher balances would display with larger triangles than loans with lower balances. High lending areas are easy to spot on the map.

Build Assessment Areas from Several Different Types of Geography

For example, if your assessment area consists of one county and three Census Tracts, you can select the county and all three Census Tracts in the same step. CRA Analyzer imports the data and displays a colored boundary around the assessment area.

New Color Schemes

Choose from many new color schemes to map your data thematically and make your maps more attractive and easy to read.

Export your CRA Analyses for Archiving or for Transferring to Another Computer

You never have to search for the files that belong to a specific analysis; CRA Analyzer exports them all to the disk or directory you choose.

FLASH REPORTS

Flash reports are reports that can be created for a Census Tract or Block Group by clicking on that geographic area on the map. Reports can be previewed, printed or exported to a file. There are three standard report categories available:

- Demographic
- Market share
- Variable

FLASH REPORTS (cont'd)

Demographic Report

The **Demographic Report** displays the number, name, Population, Median Family Income and the MSA Income Index for the Census Tract or Block Group you selected.

Click the **Demographic Tool**. When you bring your cursor onto the map it becomes a lightning bolt. Point the end of the cursor on the Census Tract for which you want demographics and **click**. The report displays on your screen. Click **Close** when you are done.

Market Share Report

The **Market Share Report** processes and displays a list of the top five reporters receiving the highest number of applications in the tract, their reporter ID, the regulating agency, the number of applications received and their Tract share for the Census Tract you clicked. This same information is displayed for the current reporter.

Click the **Market Share**  **Tool**. When you bring your cursor onto the map it becomes a lightning bolt. Point the end of the cursor at the Census Tract for which you want a report and **click**. CRA Analyzer asks you whether you want to compare your data to another reporter's data. Choosing yes allows you to optionally include a reporter of choice in this report as a sixth listing. Choosing no displays the report. Click **Close** when you are done.

Variable Reports

Variable Reports display a list of all variables for the Census Tract you choose.

Click the **Variable Tool**. When you bring your cursor onto the map it becomes a lightning bolt. Point the end of the cursor at the Census Tract for which you want a report and **click**. The report displays on your screen.

To Assign a Flash Report to a Tool

In addition to the three standard reports available on the flash reports toolbar, it is also possible to assign an alternative flash report to any tool. You then will be able to produce the following additional flash reports:

- Bank Information
- Census Tract Demographic Worksheet
- The Loan Information by Income of Applicant as a Percentage of Median Family Income Worksheet

1. **Right click** the tool to which you want to assign a flash report. The *Select Report* dialog box appears.
2. Select a flash report to assign to that tool and click **OK**. CRA Analyzer assigns the selected report to the tool. The report remains assigned to the tool until you change it.

FLASH REPORTS (cont'd)

To Assign a Flash Report to a Tool (cont'd)

Bank Information flash report

You can view bank information for the bank closest to any point you click, by generating a **Bank Information flash report**. This report includes branch, main office, holding company, primary regulator, and minority status information for the bank closest to the point you click.

Census Tract Demographic Worksheet flash report

You can generate a **Census Tract Demographic Worksheet flash report** for any Census Tract that you click your map within an assessment area. This report includes demographic, income and poverty, labor and business, and housing data for each assessment area. This report does not contain information for Block Groups. If your analysis is at the Block Group level, this report does not contain data.

Loan Information by Income of Applicant as a Percentage of Median Family Income Worksheet flash report

If your analysis contains HMDA or CRA loan data, you can view loan information by applicant income for any Census Tract you click your map. The Loan Information by Income of Applicant as a Percentage of Median Family Income Worksheet flash report shows various types of borrowing, applications, originations, and purchases.

GENERATING REPORTS

You can customize reports for assessment areas using the reports feature of CRA Analyzer. Reports can be previewed, printed or exported. Four levels of reports are available:

- Standard
- Loan Detail
- Worksheets

Standard Reports

Market Share Performance Report gives you information for the assessment area you specify on a specific category of information such as loan type or action taken. The report compares the assessment area with an area composed of all census tracts in which the reporter has loan activity.

Minority Lending Report gives you information for the assessment area you specify on a specific category of information such as total applications by race, action by race or loan purpose by race.

Census Tract Summary Report provides a summary of lending and demographic information for Census Tracts within an assessment area that you specify.

Applicant Income Class Report gives you applicant income classifications by Census Tract including reports and aggregate originations. Information is reported by Census Tract for the assessment area you choose on a specific category of information such as total applications, originated, approved/not accepted, denied, withdrawn, incomplete and purchased.

GENERATING REPORTS (cont'd)

Standard Reports (cont'd)

Market Rank Report gives you a list of reporters receiving the most applications per Census Tract. Institutions are ranked from highest to lowest applications for the assessment area you specify based on a specific category such as total applications, originated, approved/not accepted, denied, withdrawn, incomplete and purchased.

Custom Report allows you to create a report of up to 10 different variables for an assessment area that you choose. You can also customize the way the variables appear in the report such as currency, fixed, etc.

Dispersion Analysis Report displays information for a single assessment area or all assessment areas within your analysis. The report includes the number of Census Tracts with and without originations for low, moderate, middle and upper income.

Although there are seven different standard reports available, the steps for generating each are similar.

To Generate a Market Share Performance Report

1. Select Reports>Standard.
2. Select Market Share Performance from the submenu. The Market Share Performance Report Setup dialog box appears.
3. In the Assessment Area section, select an assessment area for this report. Note that all analyses include a HMDA assessment area consisting of all areas where there are loans and/or a reporter has HMDA activity.
4. Use the Market Share Category drop-down list to select a category for this report:
   - Loan Type
   - Action Taken
   - Loan Purpose
   - Applicant Race
   - Applicant Gender
5. After you make your selections, click:
   - Print Setup to specify printer options. Click OK to return to the Market Share Performance Report Setup dialog box.
   - Preview to display the report on the screen. Click Close to return to the Market Share Performance Report Setup dialog box.
   - Print to print the report without first displaying it on the screen.
   - Exit to return to your analysis

GENERATING REPORTS (cont'd)

Loan Detail Reports

With CRA Analyzer, you can quickly produce these loan detail reports:

- Analysis of a Loan Portfolio Report
- FEMA Analysis Report
- General Exceptions Report
- Geocoding Exceptions from CRA Version 1.2 Report
- Geocoding PO Exceptions from CRA Version 1.2 Report
- HMDA Exceptions from CRA Version 1.2 Report
- Loan Portfolio Detail Report
- Unit Loan Report (Sorted by MSA Income Index)
- Unit Loan Report (Sorted by Applicant Income Index)

Analysis of a Loan Portfolio Report provides loan information and selected demographic data by Census Tract for a specified assessment area or all assessment areas. The report summarizes information by income category and provides subtotals of the number of loans and the percentage of the assessment area or of all assessment areas.

FEMA Analysis Report lists all loans in the analysis that fall within FEMA zones. You must have FEMA data installed and the appropriate CDs to generate this report.

General Exceptions Report displays exceptions, loan records without accurate geographic identifiers that CRA Analyzer can match to locations on the map during the import process.

Geocoding Exceptions from CRA V1.2 Report displays exceptions, any loan records that CRA Analyzer cannot accurately match to a latitude and longitude on the map during the import process.

Geocoding PO Exceptions from CRA V1.2 Report displays exceptions, any loan records that CRA Analyzer cannot accurately match to a latitude and longitude on the map during the import process because their address field contains a PO Box.

HMDA Exceptions from CRA V1.2 Report displays exceptions, loan records that CRA Analyzer cannot match to a location on the map during the import process.

Loan Portfolio Detail Report provides loan information and selected demographic data by Census Tract income category.

Unit Loan Report (sorted by MSA Income Index) provides loan information and selected demographic data sorted by MSA Income category.

Unit Loan Report (sorted by Applicant Income Index) provides loan information and selected demographic data sorted by Applicant Income Index.

GENERATING REPORTS (cont'd)

To Generate a Loan Detail Report

1. Select Reports>Loan Detail. The Loan Detail Reports dialog box appears.
2. Use the Which Report drop-down list to select General Exceptions Report.
3. If you are generating the Analysis of a Loan Portfolio report, use the Assessment Area drop-down list to select one assessment area or all assessment areas for the analysis.
4. If you are generating the Analysis of a Loan Portfolio report, select an income index in the Income Index section.
   - MSA to use the MSA Index for the report
   - County to use the County Income Index for the report
5. In the Loan Group section, select:
   - HMDA/CRA Transactions to produce the report for HMDA and CRA loans in your analysis.
   - Other Transactions to produce the report for loan portfolio loans in your analysis
6. If you are generating the Analysis of a Loan Portfolio report, select up to three variables from the list of all numeric variables in the analysis.
7. After you make your selections, click:
   - Print Setup to specify printer options. Click OK to return to the Loan Detail Reports dialog box.
   - Preview to display the report on the screen. Click Close to return to the Loan Detail Reports dialog box.
   - Print to print the report without first displaying it on the screen.
   - Exit to return to your analysis.

Worksheets

With CRA Analyzer, you can quickly generate these worksheets:

- Assessment Area Overview Worksheet
- Assessment Area In-Depth Worksheet
- Economic Patterns Worksheet
- Summary of Census Tracts Just Outside Assessment Area Worksheet
- Lending Profile Summary Worksheet
- Loan Mix of Reportable Loans and Distribution of Loans Inside/Outside of Assessment Area Worksheet
- Distribution of Loans Across Assessment Area by Income Level of Census Tract Worksheet

GENERATING

- Distribution of Loans Across Assessment Area by Income Level of Applicant

REPORTS (cont'd)

Worksheets (cont'd)

Worksheet

- Distribution of Small Business/Small Farm Loans Originated and Purchased Worksheet
- Census Tract Detail Worksheet
- Loan Information by Income of Applicant as a Percentage of Median Income Worksheet
- Tract Level Demographics Worksheet
- Penetration Comparisons of HMDA/Consumer Loans Worksheet

To Generate a Worksheet

1. Select Reports>Worksheets. The Worksheets dialog box appears.
2. Use the Which Worksheet drop-down list to select a worksheet.
3. Use the Assessment Area drop-down list to select an assessment area for the worksheet.
4. If the Outside (Surrounding) Area section is available, select the assessment area which surrounds the area selected in the Assessment Area section.
5. If the Query section is available, use the Query drop-down list to select:
   - Both Originations and Purchases
   - Originations Only
   - Purchases Only
6. If the Which Data section is available, select the data on which to base your worksheet:
   - STF3A - Sample 1990 counts (to match FRB worksheets) for estimated Census data
   - STF1A - Actual 1990 counts for actual Census data
7. After you make your selections:
   - Click Print Setup to specify printer options. Click OK to return to the Worksheets dialog box
   - Click Preview to display the report on the screen. Click Close to return to the Worksheets dialog box
   - Click Print to print the report without first displaying it on the screen
   - Click Exit to return to your analysis

FDIC LAW, REGULATIONS, & RELATED ACTS

Applicable Rules	None
Advisory Opinions	None
Statements of Policy	None
DCA MEMORANDA	None
FINANCIAL INSTITUTION LETTERS (FIL)	None